Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Message Text

UNCLASSIFIED

PAGE 01 IAEA V 03450 01 OF 02 181450Z

50
ACTION IO-14

INFO OCT-01 EUR-25 ISO-00 SCI-06 ACDA-19 CIAE-00 INR-10

L-03 NSAE-00 NSC-07 RSC-01 FEA-02 DRC-01 AF-10 ARA-16

EA-11 NEA-10 OMB-01 TRSE-00 AID-20 SS-20 IOE-00 PRS-01

/178 W
---------- 107381
P R 181340Z APR 74
FM USMISSION IAEA VIENNA
TO SECSTATE WASHDC PRIORITY 4251
INFO AEC GERMANTOWN PRIORITY
USMISSION EC BRUSSELS
USMISSION GENEVA
USMISSION OECD PARIS
USMISSION USUN

UNCLAS SECTION 1 OF 2 IAEA VIENNA 3450

STATE ALSO FOR T/IEP

E.O. 11652: N/A
TAGS: IAEA, TECH, ENRG, EAID
SUBJECT: PROPOSED EXPANDED IAEA TRAINING PROGRAM FOR INTRODUCTION OF NUCLEAR POWER IN DEVELOPING COUNTRIES

REF: IAEA VIENNA 3383

SUMMARY. DDG CHERNILIN DESIRES DISCUSS PROPOSED EXPANDED AGENCY TRAINING PROGRAM RELATED TO INTRODUCTION NUCLEAR POWER IN DEVELOPING COUNTRIES DURING HIS VISIT TO U.S. NEXT WEEK. DRAFT PAPER ON SUBJECT PREPARED BY SECRETARIAT SUMMARIZED BELOW. PROPOSED PROGRAM WILL REQUIRE ADDITIONAL MINIMUM FUNDING ON ORDER OF $800,000, NOT RPT NOT INCLUDING COSTS HOPEFULLY TO BE BORNE BY REACTOR SUPPLIER MEMBER STATES SPONSORING THIS PROGRAM IN CONDUCTING NECESSARY TRAINING COURSES. MISSION HAS SOME DOUBTS ABOUT SPECIFIC
UNCLASSIFIED

UNCLASSIFIED

PAGE 02 IAEA V 03450 01 OF 02 181450Z

ASPECTS OF AGENCY DRAFT PAPER, BUT BELIEVES AGENCY IS

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

MOVING IN RIGHT DIRECTION. END SUMMARY.

1. DDG CHERNILIN INFORMED US THAT HE WILL WISH ALSO TO DISCUSS WITH APPROPRIATE AEC OFFICIALS DURING HIS VISIT TO U.S. NEXT WEEK THE PROPOSED EXPANSION OF AGENCY'S TRAINING PROGRAM RELATED SPECIFICALLY TO INTRODUCTION OF NUCLEAR POWER IN DEVELOPING COUNTRIES. HE SAID HE IS UNDER-TAKING SIMILAR INFORMAL DISCUSSIONS WITH OFFICIALS OF OTHER MAJOR POWER REACTOR SUPPLIER COUNTRIES, SINCE IT IS CLEAR THAT THERE MUST BE SUPPORT FOR PROGRAM FROM THESE COUNTRIES IF IT IS TO SUCCEED. HIS AIM IS TO GET ENOUGH EXPRESSIONS OF INTEREST AND SUPPORT IN ADVANCE OF JUNE BG MEETING AT WHICH TIME THIS PROPOSED EXPANDED PROGRAM WILL BE CONSIDERED, ALONG WITH OTHER PARTS OF "PACKAGE" SET FORTH IN GOV/COM.9/96, PLUS EXERCISE RELATED TO DEVELOPMENT OF NUCLEAR SAFETY GUIDELINES. HE HANDED US DRAFT PAPER ON SUBJECT PREPARED BY JAMES LANE, ROBERT SKJOELDEBRAND AND SEYMOUR (TIM) HAMMON, MAIN POINTS OF WHICH SUMMARIZED BELOW. (COPY SENT INTERNATIONAL AIR MAIL TO AMMONS, AEC, AND VIA POUCH TO AMBASSADOR TAPE AND GALANTO, IO/SCT).

2. PAPER NOTES THAT RECENT OIL PRICE INCREASES ARE LIKELY TO DOUBLE NUMBER OF COUNTRIES (FROM 15 TO 30) EXPECTED TO INITIATE NUCLEAR POWER PROGRAMS AT AN EARLY DATE, AND THAT PRESENT AGENCY TRAINING PROGRAM MUST BE ACCELERATED AND EXPANDED TO MEET GROWING NEEDS FOR SKILLED MANPOWER IN DEVELOPING COUNTRIES TO IMPLEMENT NUCLEAR POWER PROJECTS.

3. MANPOWER FOR NUCLEAR POWER PROGRAM MUST BE TRAINED IN THREE ORGANIZATIONAL CATEGORIES: (A) LICENSING AND REGULATORY GROUP STAFFED WITH GOVERNMENT PERSONNEL; (B) PROJECT GROUP OF UTILITY AND GOVERNMENT STAFF TO PLAN, EVALUATE, SELECT AND FOLLOW EACH NUCLEAR POWER PROJECT UP TO DATE OF COMMISSIONING; AND (C) OPERATIONS GROUP STAFFED WITH UTILITY PERSONNEL TO RUN PLANT AFTER COMMISSIONING. AGENCY ASSISTANCE WOULD FOCUS PRIMARILY ON TRAINING FOR GROUPS A AND B.

UNCLASSIFIED

UNCLASSIFIED

4. PROJECT GROUP'S ORGANIZATIONAL STRUCTURE TYPICALLY INCLUDES: PROJECT MANAGER'S OFFICE, ENGINEERING SECTION, SITING AND SAFETY SECTION, FUEL SUPPLY AND MANAGEMENT SECTION, QUALITY ASSURANCE SECTION, CONSTRUCTION SECTION, AND PUBLIC INFORMATION SECTION. ASSUMING AGENCY'S RESPONSIBILITY WOULD BE LIMITED TO TRAINING PROJECT MANAGER AND EACH SECTION HEAD, IMMEDIATE NEEDS OF 30 DEVELOPING COUNTRIES LIKELY TO REQUEST TRAINING ASSISTANCE

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

COULD BE MET BY TRAINING ABOUT 50 KEY PEOPLE PER YEAR
OVER NEXT FIVE YEARS.

5. CONERSTONE OF TRAINING PROGRAM WOULD BE A COURSE
IN NUCLEAR POWER ENGINEERING GIVEN ANNUALLY. COURSE WOULD
BE DIFFERENT FROM NORMAL NUCLEAR ENGINEERING COURSES
AND WOLD BE DESIGNED TO PROVIDE QUALIFIED TECHNICAL
PERSONNEL FOR PLANNING AND CONSTRUCTION PHASES OF NUCLEAR
POWER PROJECTS. TRAINEES WOULD BE MAINLY CIVIL, MECHANICAL
AND ELECTRICAL ENGINEERS WITH 5-10 YEARS EXPERIENCE ON
HEAVY CONSTRUCTION PROJECTS. COURSES WOULD BE 6-9 MONTHS
LONG AND OF PRACTICAL RATHER THAN THEORETICAL NATURE.
SYLLABUS WOULD INCLUDE: POWER SYSTEM PLANNING; NUCLEAR
REACTORS; REACTOR TYPES AND CHARACTERISTICS; NUCLEAR
STEAM SYSTEM AND BALANCE OF PLANT; NUCLEAR FUEL
CYCLE; ENVIRONMENT AND SITING CONSIDERATIONS; QUALITY
ASSURANCE METHODS; RADIATION SAFETY AND PROTECTION; WASTE
DISPOSAL; CONTRACT PREPARATION AND BID EVALUATION;
LICENSING AND REGULATORY ASPECTS; AND PROJECT PLANNING
AND EXECUTION.

6. MEMBER STATES HAVING AN INTEREST IN SPONSORING SUCH
TRAINING PROGRAM SHOULD MAKE THEIR INTEREST KNOWN TO
AGENCY. AT AVERAGE COST OF $10,000 PER MAN FOR TRAVEL
AND SUBSISTENCE, AGENCY'S CASH REQUIREMENTS FOR SUCH
PROGRAM WOULD BE ON ORDER OF $500,000 PER YEAR, IN
ADDITION TO COST OF RUNNING COURSE ITSELF. (AGENCY
HOPES SPONSORING MEMBER STATES WOULD ASSUME ALL RPT ALL
OF LATTER COSTS.)

7. AS FOLLOW UP TO NUCLEAR POWER ENGINEERING COURSE,
THREE OR FOUR COMPARATIVELY HIGHLY SPECIALIZED TRAINING
COURSES SHOULD BE GIVEN EACH YEAR ACCORDING TO DEMAND.
UNCLASSIFIED

UNCLASSIFIED

PAGE 04 IAEA V 03450 01 OF 02 181450Z

THESE COURSES WOULD INCLUDE: REGULATORY AND LICENSING
ASPECTS; PLANNING AND SCHEDULING FOR FIRST NUCLEAR
POWER STATION; QUALITY ASSURANCE AND NON-DESTRUCTIVE
TESTING; RADIATION AND HEALTH PHYSICS; ECONOMIC PLANNING
OF POWER SYSTEMS; CONSIDERATION FOR SELECTION OF VARIOUS
REACTOR TYPES AND VENDORS; SAFETY STANDARDS, REGULATIONS,
AND
E E E E E E E E

ADP000
UNCLASSIFIED

PAGE 01 IAEA V 03450 02 OF 02 181502Z

50

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

ACTION IO-14

INFO OCT-01 EUR-25 ISO-00 SCI-06 ACDA-19 CIAE-00 INR-10

L-03 NSAE-00 NSC-07 RSC-01 FEA-02 DRC-01 AF-10 ARA-16

EA-11 NEA-10 OMB-01 TRSE-00 AID-20 SS-20 IOE-00 PRS-01

/178 W

---------- 107508

P R 181340Z APR 74
FM USMISSION IAEA VIENNA
TO SECSTATE WASHDC PRIORITY 4252
INFO AEC GERMANTOWN PRIORITY
USMISSION EC BRUSSELS
USMISSION GENEVA
USMISSION OECD PARIS
USMISSION USUN NEW YORK

UNCLAS SECTION 2 OF 2 IAEA VIENNA 3450

STATE ALSO FOR T/IEP

FOR ON-THE-JOB TRAINING TO LEARN CURRENT NUCLEAR POWER CONSTRUCTION AND SAFETY TECHNIQUES. ASSISTANCE FROM ADVANCED COUNTRIES PROBABLY ESSENTIAL FOR THIS KIND OF TRAINING. THIS SPECIAL FELLOWSHIP COMPONENT WOULD COST ABOUT $400,000 PER YEAR, OF WHICH ONLY HALF COULD BE MET FROM PRESENT AGENCY PROGRAM.

10. IN SUMMARY, ADDITIONAL MINIMUM CASH FUNDING REQUIRED BY AGENCY FOR FOREGOING PROGRAM WOULD BE $500,000 FOR NUCLEAR ENGINEERING COURSE, $100,000 FOR SPECIAL TRAINING COURSES, AND $200,000 FOR SPECIAL FELLOWSHIPS. COMMENT: MISSION BELIEVES SERIOUS EFFORT SHOULD BE MADE TO OBTAIN BULK OF THIS ADDITIONAL CASH FROM UNDP; WE UNDERSTAND SECRETARIAT INTENDS TO MAKE SUCH EFFORT AND THAT MATTER HAS BEEN DISCUSSED INFORMALLY WITH UNDP/NY OFFICIAL VISITING VIENNA. END COMMENT.

UNCLASSIFIED
UNCLASSIFIED

PAGE 02 IAEA V 03450 02 OF 02 181502Z

11. PAPER NOTES THAT IMPLEMENTATION OF PROGRAM COULD BE UNDERTAKEN ALONG FOLLOWING LINES:

A. SINCE SUCCESS OF PROPOSED PROGRAM IS CONTINGENT ON FINDING MEMBER STATES WILLING TO PROVIDE, COST-FREE TO AGENCY, NECESSARY FACILITIES, STAFF AND ATTENDANT FINANCIAL SUPPORT FOR CARRYING IT OUT, IMPORTANT FIRST STEP IS TO CONTACT SELECTED MEMBER STATES TO INFORM THEM OF AGENCY'S PLANS TO OBTAIN, IF POSSIBLE, SOME PRELIMINARY

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

COMMITMENT FOR FACILITIES AND FINANCIAL SUPPORT OF PROGRAM.
THIS WILL BE DONE PRIOR TO JUNE BG MEETING.
COMMENT: MISSION ALSO NOTES THAT WITHOUT SOME FAIRLY
CONCRETE POSITIVE INDICATIONS FROM ADVANCED MEMBER
STATES ON THIS SCORE, DISCUSSION OF THIS SUBJECT COULD
HAVE UNFAVORABLE REPERCUSSIONS ON DISCUSSION OF TARGET
FOR VOLUNTARY CONTRIBUTIONS FOR 1975, WHICH WILL ALSO
TAKE PLACE IN JUNE. END COMMENT.

B. IF BG APPROVES PROPOSAL, NEXT STEP WOULD BE
TO ENGAGE OUTSIDE CONSULTANTS TO PREPARE CURRICULA FOR
TRAINING COURSES, WITH AIM OF COMPLETING THIS TASK BY
SEPTEMBER 1974.

C. DETAILED COURSE CURRICULA WOULD THEN BE REVIEWED
BY MEETING OF EXPERTS FROM MEMBER STATES OFFERING TO
SPONSOR PROGRAM. THIS MEETING SHOULD BE HELD DURING
JANUARY-FEBRUARY 1975.

D. FOLLOWING APPROVAL BY PANEL OF CURRICULA AND
ASSOCIATED PLANS. AGENCY STAFF WOULD PREPARE DETAILED
REPORT FOR CIRCULATION TO ALL MEMBER STATES LIKELY TO
REQUEST ASSISTANCE IN THIS FIELD. TARGET DATE FOR
COMPLETION SUCH REPORT WOULD BE MARCH-APRIL 1975.

E. IF FOREGOING SCHEDULE MAINTAINED, FIRST COURSES
COULD BEGIN SEPTEMBER 1975. THIS CONNECTION, IT IS
IMPORTANT TO PLACE HIGH PRIORITY ON SPECIAL COURSE IN
HEALTH PHYSICS, RADIATION PROTECTION AND SAFETY,
SINCE SUCH TRAINING WILL BE NEEDED AT EARLIEST POSSIBLE
DATE.

UNCLASSIFIED
UNCLASSIFIED

12. DRAFT PAPER ALSO INCLUDES TYPICALORGANIZATION
CHARTS RELATED TO NUCLEAR POWER PROJECTS AND
CHART SHOWING MINIMUM PROJECT STAFF REQUIREMENTS FOR
TYPICAL TURN-KEY PROJECT AND TIMING OF THEIR NEED.
LATTER CHART, FOR EXAMPLE, SHOWS THAT EIGHT STAFF MEMBERS
AS FOLLOWS SHOULD BE TRAINED 11 YEARS PRIOR TO ROUTINE
OPERATION OF NUCLEAR POWER PLANT: PROJECT MANAGER'S
OFFICE (2); ENGINEERING SECTION (4); SITING AND SAFETY
SECTION (1); PUBLIC INFORMATION SECTION (1). FOLLOWING
ADDITIONAL 11 STAFF MEMBERS WOULD BE ADDED NINE YEARS
BEFORE ROUTINE OPERATION OF PLANT: PROJECT MANAGER'S
OFFICE 1(); ENGINEERING SECTION (3); SITING AND SAFETY
SECTION (2); FUEL SUPPLY AND MANAGEMENT SECTION (1);
QUALITY ASSURANCE SECTION (3); CONSTRUCTION SECTION (1).
FOLLOWING ADDITIONAL NINE STAFF MEMBERS WOULD BE ADDED
SIX YEARS BEFORE ROUTINE OPERATION OF PLANT: SITING AND
SAFETY SECTION (1); QUALITY ASSURANCE SECTION (3);

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

CONSTRUCTION SECTION (5). ONE ADDITIONAL STAFF MEMBER IN SITING AND SAFETY SECTION WOULD BE ADDED AT TIME OF COMMISSIONING OF PLANT, OR ONE YEAR BEFORE ROUTINE OPERATION. TOTAL PROJECT GROUP STAFF AT THAT TIME WOULD BE 29. BULK OF OPERATIONS GROUP PERSONNEL WOULD BE ADDED THREE TO SIX YEARS PRIOR TO ROUTINE OPERATION OF PLANT. TOTAL OPERATIONS GROUP PERSONNEL AT THAT TIME WOULD BE 63.

13. MISSION COMMENT: BELIEVE AGENCY DRAFT REFLECTS REASONABLE ANALYSIS OF PROBLEM, ALTHOUGH THEY MAY HAVE UNDERESTIMATED DEMAND, PARTICULARLY IN EARLY YEARS. IN ADDITION, BELIEVE PROPOSED PROGRAM MIGHT REQUIRE ADDITIONAL EXAMINATION TO DETERMINE WHETHER ITS CONTENT IS COMPLETE, PARTICULARLY IN LIGHT OF FACT THAT MOST TRAINEES WILL BE NATIONALS OF DEVELOPING COUNTRIES WHO WILL HAVE TO MANAGE NUCLEAR POWER PROGRAMS IN DEVELOPING WORLD ENVIRONMENT. WE ALSO HAVE SOME DOUBTS AS TO FEASIBILITY OF NECESSITY OF DEVELOPMENT OF SINGLE
S
E E E E E E E E

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Message Attributes

Automatic Decaptioning: X
Capture Date: 01 JAN 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: PERSONNEL TRAINING, NUCLEAR ENERGY, LESS DEVELOPED COUNTRIES
Control Number: n/a
Copy: SINGLE
Draft Date: 18 APR 1974
Decaption Date: 01 JAN 1960
Decaption Note:
Disposition Action: n/a
Disposition Approved on Date:
Disposition Authority: n/a
Disposition Case Number: n/a
Disposition Comment:
Disposition Date: 01 JAN 1960
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1974IAEAV03450
Document Source: CORE
Document Unique ID: 00
Drafter: n/a
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Film Number: D740090-0467
From: IAEA VIENNA
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1974/newtext/t19740434/aaaabdrq.tel
Line Count: 292
Locator: TEXT ON-LINE, ON MICROFILM
Office: ACTION IO
Original Classification: UNCLASSIFIED
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 6
Previous Channel Indicators: n/a
Previous Classification: n/a
Previous Handling Restrictions: n/a
Reference: IAEA VIENNA 3383
Review Action: RELEASED, APPROVED
Review Authority: kellerpr
Review Comment: n/a
Review Content Flags:
Review Date: 04 SEP 2002
Review Event:
Review Exemptions: n/a
Review History: RELEASED <04 SEP 2002 by BryanSD>; APPROVED <27 DEC 2002 by kellerpr>
Review Markings:

Declassified/Released
US Department of State
EO Systematic Review
30 JUN 2005

Review Media Identifier:
Review Referrals: n/a
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
Secure: OPEN
Status: NATIVE
Subject: PROPOSED EXPANDED IAEA TRAINING PROGRAM FOR INTRODUCTION OF NUCLEAR POWER IN DEVELOPING
TAGS: TECH, ENRG, EAID, IAEA
To: STATE
Type: TE
Markings: Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005